

REMARKS

Claims 1 and 5 stand rejected under 35 U.S.C. §102(b) as being anticipated by Dewitte et al. (U.S. Patent No. 4,957,572). In response, Applicant amended claim 1 and traverses the rejection based on these amendments.

In the fixed displacement pump of the present invention, the spacer forming material earlier filled in a pump chamber is supplied to an applicator head by passing through between an inner peripheral surface of the pump housing and an outer peripheral surface of the extrusion rod. In this manner, an old spacer forming material can be prevented from being accumulated in the pump chamber. For example, as discussed in paragraph [0090] *et seq.* in one embodiment, the spacer forming material supply means 17 shown in FIG. 15 of the present invention is arranged such that two fixed displacement pumps 173 are connected in parallel to an extruder 171.

As further discussed in paragraph [0092] of the present Application, while the spacer forming material supplied to the applicator head 13 by one of the fixed displacement pumps 173, the other of the fixed displacement pumps 173 can be charged with the spacer forming material from the extruder 171. Thus, the spacer 3 is formed by using one of the fixed displacement pumps 173 and, subsequently, the next spacer 3 can be formed by using the other of the fixed displacement pumps. Advantageously, productivity can be enhanced as compared to the case where one fixed displacement pump is used.

Dewitte is directed to a method and apparatus for production of a bead of organic material intended to serve as a seal and insert in a multiple glazing. In the outstanding rejection, the Examiner asserts that Dewitte has a reciprocating pump 8 that corresponds to the fixed displacement pump of the present invention. However, Dewitte fails to disclose or suggest the steps of feeding the spacer forming material to the pump chamber by an extrusion rod being moved backward by extrusion pressure of a spacer forming material extruded from an extruding means, in combination with the step of supplying the spacer forming material fed into the pump chamber to an applicator head by the extrusion rod being moved forward to cause the space forming material to pass through between the inner peripheral of the pump housing and the outer peripheral surface of the piston rod. Accordingly, Applicant respectfully request withdrawal of the §102(b) anticipation rejection of claims 1 and 5.

Claims 1 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Applicant's Admitted Prior Art ("AAPA") in view of either Dewitte et al. or Trpkovski (U.S. Publication No. 2003/0101664). Applicant respectfully traverses the rejection for the reasons recited above with respect to the rejection of independent claim 1.

On page 4, second paragraph of the outstanding Office Action, the Examiner admits that the AAPA is silent as to a method of using a fixed displacement pump for supplying the spacer forming material from the extruding means to the applicator head. Instead, the Examiner asserts that Dewitte teaches this feature.

However, for the reasons discussed above, Dewitte fails to disclose or suggest a step of supplying the spacer forming material as now recited in amended claim 1. Dewitte merely teaches a double-action reciprocating pump 8 pumping the organic material into the conical end of plate 7 and delivering the pump material at its output end 9. (See col. 5, lines 5-10).

Trpkovski is directed to methods and devices for manufacturing insulating glass units. Trpkovski is cited by the Examiner as teaching the spacer forming material supply means in paragraph [0058]. However, Trpkovski also fails to disclose or suggest the steps of feeding the spacer forming material to the pump chamber by an extrusion rod being moved backward by extrusion pressure of the spacer forming material extruded from the extruding means, and supplying the spacer forming material fed into the pump chamber to the applicator head by the extrusion rod being moved forward to cause this space forming material to pass through between the inner peripheral surface of the pump housing and the outer peripheral of the piston rod. Therefore, any combination of the AAPA, Dewitte and Trpkovski fail to disclose or suggest this feature. For this reason, withdrawal of the §103(a) rejection of claims 1 and 5 is respectfully requested.

New claim 14 is added and further clarifies that a plurality of fixed displacement pumps are connected in parallel to the extruding means, and while the spacer forming material is supplied to the applicator head by one of the fixed displacement pumps, the spacer forming material is charged to an other fixed displacement pump. Applicant earnestly solicits allowance of new claim 14 based on the

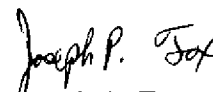
features recited in this claim, and also for the reasons provided above with respect to the rejection of independent claim 1.

For all of the foregoing reasons, Applicant submits that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

If a Petition under 37 C.F.R. §1.136(a) for an extension of time for response is required to make the attached response timely, it is hereby petitioned under 37 C.F.R. §1.136(a) for an extension of time for response in the above-identified application for the period required to make the attached response timely. The Commissioner is hereby authorized to charge any additional fees which may be required to this Application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069.

Respectfully submitted,

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